Comparisons of Job Characteristics

Focus Occupation: Conservation Scientists (19-1031)

Associated Occupation: Foresters (19-1032)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

| << | Focus occupation element is much lower |
|----|--|
| < | Focus occupation element is lower |
| 0 | Focus occupation element is at a similar level |
| > | Focus occupation element is at a higher level |
| >> | Focus occupation element is at a much higher level |

| Knowledge | Similarity of Focus Occupation to Associated Occupation: 82 | | | | |
|--|---|------|---------------------------------|--|---|
| Focus Occupation: Conservation Scientists (19-1031) Associated Occupation: Foresters (19-1032) | | | | | |
| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | | Focus Occupation's Rating | Evaluation of Focus Occupation | |
| Biology | 3.7 | 12.8 | 16.2 | Current knowledge level is likely more than sufficient | |
| Geography | 3.9 | 9.0 | 14.3 | >> | Current knowledge level is likely more than |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Conservation Scientists (19-1031) Associated Occupation: Foresters (19-1032)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|--|---------------------------------------|--------------------------------------|---------------------------------|--------------------------------|--|
| Monitoring | 9.9 | 16.7 | 11.4 | << | Extensive development of skills in this area may be required |
| Coordination | 9.1 | 15.4 | 10.7 | << | Extensive development of skills in this area may be required |
| Judgment and Decision Making | 9.4 | 15.1 | 11.2 | << | Extensive development of skills in this area may be required |
| Systems Analysis | 6.5 | 14.6 | 9.3 | << | Extensive development of skills in this area may be required |
| Complex Problem Solving | 9.1 | 14.5 | 10.8 | << | Extensive development of skills in this area may be required |
| Systems Evaluation | 6.4 | 12.6 | 8.7 | << | Extensive development of skills in this area may be required |
| Time Management | 8.9 | 12.5 | 9.0 | << | Extensive development of skills in this area may be required |

| Negotiation | 6.8 | 11.9 | 8.5 | Extensive development of skills in this area may be required |
|-----------------------------------|-----|------|-----|--|
| Management of Personnel Resources | 6.9 | 11.8 | 8.6 | Extensive development of skills in this area may be required |
| Management of Material Resources | 3.7 | 7.5 | 4.7 | Extensive development of skills in this area may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Conservation Scientists (19-1031) Associated Occupation: Foresters (19-1032)

| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation | |
|---|---------------------------------------|--------------------------------------|---------------------------------|----|--|--|
| Problem Sensitivity | 11.1 | 14.8 | 13.0 | < | Some improvement in abilities may be required | |
| Category Flexibility | 9.0 | 13.0 | 10.2 | < | Some improvement in abilities may be required | |
| Originality | 7.6 | 12.6 | 10.1 | < | Some improvement in abilities may be required | |
| Time Sharing | 6.6 | 8.4 | 7.1 | < | Some improvement in abilities may be required | |
| Spatial Orientation | 2.7 | 8.3 | 5.0 | << | Extensive improvement in abilities may be required | |
| Dynamic Strength | 3.5 | 6.6 | 4.4 | << | Extensive improvement in abilities may be required | |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 91

Focus Occupation: Conservation Scientists (19-1031) Associated Occupation: Foresters (19-1032)

| Work Activities | Exclusivity of Activity |
|--|-------------------------|
| Adhere to safety procedures | 12 |
| Advise clients or customers | 19 |
| Advise governmental or industrial personnel | 28 |
| Analyze biological research, test, or analysis data | 70 |
| Analyze ecosystem data | 69 |
| Analyze scientific research data or investigative findings | 27 |
| Classify plants, animals, or other natural phenomena | 69 |
| Collect scientific or technical data | 30 |
| Collect statistical data | 47 |
| Communicate technical information | 4 |

| Conduct field research or investigative studies | 52 |
|--|----|
| Conduct training for personnel | 30 |
| Confer with engineering, technical or manufacturing personnel | 25 |
| Confer with research personnel | 50 |
| Confer with scientists | 54 |
| Develop or maintain databases | 30 |
| Develop plans for programs or projects | 31 |
| Develop policies, procedures, methods, or standards | 21 |
| Develop tables depicting data | 33 |
| Direct and coordinate activities of workers or staff | 3 |
| Direct and coordinate scientific research or investigative studies | 27 |
| Direct implementation of new procedures, policies, or programs | 60 |
| Ensure compliance with government regulations | 76 |
| Estimate population or condition of plant life, fish, or wildlife | 92 |
| Explain complex mathematical information | 30 |
| Interpret aerial photographs | 69 |
| Judge soil conditions | 77 |
| Make decisions | 24 |
| Make presentations | 13 |
| Operate forestry equipment | 92 |
| Perform statistical analysis | 71 |
| Plan construction of structures or facilities | 75 |
| Plan forestation, reforestation, or range revegetation projects | 95 |
| Plan scientific research or investigative studies | 48 |
| Prepare reports | 8 |
| Prepare technical reports or related documentation | 22 |
| Provide advice on rural or urban land use | 92 |
| Read maps | 42 |
| Read measuring or metering devices used in forestry | 89 |
| Recognize plant diseases | 72 |
| Recognize tree or forest plant species | 78 |
| Recognize wood species characteristics | 78 |
| Recommend action to ensure compliance | 73 |
| Recommend further study or action based on research data | 60 |
| Record test results, test procedures, or inspection data | 48 |
| Use biological research techniques | 68 |
| Use computers to enter, access or retrieve data | 3 |
| Use cost benefit analysis techniques | 77 |
| Use fire suppression techniques | 89 |
| Use forest fire protection methods | 89 |
| Use forestry, range, or other public land management techniques | 92 |
| Use government regulations | 44 |
| Use herbicides, fertilizers, pesticides or related products | 71 |
| Use knowledge of environmental laws and regulations | 76 |
| Use knowledge of investigation techniques | 16 |
| Use knowledge of relevant laws | 77 |
| Use library or online Internet research techniques | 21 |
| Use long term forest or range land planning techniques | 95 |
| | |

| Use mathematical or statistical methods to identify or analyze problems | 30 |
|---|----|
| Use pollution control techniques | 62 |
| Use project management techniques | 47 |
| Use public speaking techniques | 13 |
| Use quantitative research methods | 35 |
| Use relational database software | 26 |
| Use scientific research methodology | 21 |
| Use spreadsheet software | 18 |
| Use word processing or desktop publishing software | 17 |
| Write business project or bid proposals | 48 |
| Write scholarly or technical research papers | 36 |

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: n/a

Focus Occupation: Conservation Scientists (19-1031)

Associated Occupation: Foresters (19-1032)

Tools and Technologies Exclusivity

Tools and technology data is unavailable for one or both occupations

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O^*NET (Occupation Information Network) data.